

DETAILED ACTION

1. This Office Action incorporates an Examiner's Amendment and Reasons For Allowance.
2. The application has pending claim(s) 1-6, 8-13, and 15-18.
3. The Board of Patent Appeals and Interferences, on 11/23/2011, reversed the Examiner's 35 U.S.C. 103(a) rejections of claims 1-6, 8-13, and 15-18 {see the BPAI Decision filed 11/23/2011 on pages 1-7}. Therefore, the 35 U.S.C. 103(a) rejections of claims 1-6, 8-13, and 15-18 have been withdrawn.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Thomas Marsteller (Reg. No. 29,672) on February 3, 2012.

The application has been amended as follows:

For the claims on pages 2-7 of the Applicant's Amendment After Non-Final dated 2/08/2008:

1. Please amend claims 8, 12, 13, and 17 as shown by the attached pages below:

Claim 8. (Currently Amended) A system for processing image information, comprising:

 a plurality of optical transformers ~~operable to receive~~ for receiving light comprising image information, a first optical transformer ~~operable to perform~~ for performing a first optical transform on the light to yield a first optically transformed light, a second optical transformer ~~operable to perform~~ for performing a second optical transform on the light to yield a second optically transformed light;

 a first processor ~~operable to generate~~ for generating a first metric in accordance with the first optically transformed light;

 a second processor ~~operable to generate~~ for generating a second metric in accordance with the second optically transformed light;

 an image processor ~~operable to process~~ for processing the first metric and the second metric to yield a processed metric;

 an inverse optical transformer ~~operable to perform~~ for performing an inverse optical transform on the processed metric to process the image information of the light; generate an image from the processed metric; and display the image.

Claim 12. (Currently Amended) The system of Claim 8, wherein the image processor is ~~operable to process~~ processes the first metric and the second metric to yield a processed metric by:

selecting first data from the first metric;

selecting second data from the second metric; and

fusing the first data and the second data to yield the processed metric.

Claim 13. (Currently Amended) The system of Claim 8, wherein the image processor is ~~operable to process~~ processes the first metric and the second metric to yield a processed metric by:

generating the processed metric in response to the first metric and the second metric; and

detecting a target using the processed metric.

Claim 17. (Currently Amended) A system for performing processing upon an image, said system comprising:

a first optical transformer ~~operable to perform~~ for performing a first optical transform on received light;

a second optical transformer ~~operable to perform~~ for performing a second optical transform on said received light;

a first sensor in communication with said first optical transformer to sense the optically transformed light and generate a first signal describing information of the light;

a second sensor in communication with said second optical transformer to sense the optically transformed light and generate a second signal describing information of the light;

a first processor in communication with said first sensor to receive said first signal and to generate first data describing one or more features of said image;

a second processor in communication with said second sensor to receive said second signal and to generate second data describing said one or more features of said image;

a third processor receiving said first and second data and forming a fused image signal therefrom;

an inverse transformer receiving the fused image signal and performing an inverse transform for said first optical transform and a second inverse transform for said second optical transform; and

a display receiving inversely transformed image data from said inverse transformer and displaying an image therefrom.

Examiner's Comments

5. The amendments entered by Examiner's Amendment into the claims after they were previously approved by the Board of Patent Appeals and Interferences is merely to put the claims in better form for allowance, and are not meant to change the scope or limitations of the claims that were before the Board.

REASONS FOR ALLOWANCE

6. The following is an examiner's statement of reasons for allowance:

Claims 1-6, 8-13, and 15-18 (now renumbered as 1-16, for issue) are allowed.

Independent claim 1 (now renumbered as claim 1, for issue) respectively recites the limitations of: generating a first metric in accordance with the first optically transformed light; generating a second metric in accordance with the second optically transformed light; processing the first metric and the second metric to yield a processed metric; performing an inverse optical transform on the processed metric to process the image information of the light; generating an image from the processed metric.

Independent claim 8 (now renumbered as claim 7, for issue) respectively recites the limitations of: a first processor for generating a first metric in accordance with the first optically transformed light; a second processor for generating a second metric in accordance with the second optically transformed light; an image processor for processing the first metric and the second metric to yield a processed metric; an inverse optical transformer for performing an inverse optical transform on the processed metric

to process the image information of the light; generate an image from the processed metric.

Independent claim 15 (now renumbered as claim 13, for issue) respectively recites the limitations of: means for generating a first metric in accordance with the first optically transformed light; means for generating a second metric in accordance with the second optically transformed light; means for processing the first metric and the second metric to yield a processed metric; means for performing an inverse optical transform on the processed metric to process the image information of the light; and means for reporting results.

Independent claim 16 (now renumbered as claim 14, for issue) respectively recites the limitations of: generating a first metric in accordance with the first optically transformed light; generating a second metric in accordance with the second optically transformed light; processing the first metric and the second metric to yield a processed metric by performing a procedure selected from the group consisting of a first procedure and a second procedure, the first procedure comprising: selecting first data from the first metric, selecting second data from the second metric, and fusing the first data and the second data to yield the processed metric, and second procedure comprising: generating the processed metric in response to the first metric and the second metric, and detecting a target using the processed metric; performing an inverse optical transform on the processed metric to process the image information of the light; generating an image from the processed metric.

Independent claim 17 (now renumbered as claim 15, for issue) respectively recites the limitations of: a first sensor in communication with said first optical transformer to sense the optically transformed light and generate a first signal describing information of the light; a second sensor in communication with said second optical transformer to sense the optically transformed light and generate a second signal describing information of the light; a first processor in communication with said first sensor to receive said first signal and to generate first data describing one or more features of said image; a second processor in communication with said second sensor to receive said second signal and to generate second data describing said one or more features of said image; a third processor receiving said first and second data and forming a fused image signal therefrom; an inverse transformer receiving the fused image signal and performing an inverse transform for said first optical transform and a second inverse transform for said second optical transform; and a display receiving inversely transformed image data from said inverse transformer and displaying an image therefrom.

The combination of these features as cited in the claims in combination with the other limitations of the claims are neither disclosed nor suggested by the prior art of record.

The closest reference Spight et al (US 4,462,046, as applied in previous Office Action) discloses a vision system to determine the degree of correlation between two signals. However, Spight does not teach the limitations cited above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 8:00am-4:00pm and every other Friday 8:00am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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